

## **REMARKS/ARGUMENTS**

Prior to this communication, Claims 1-59 were pending. In the Office action, Claims 1-59 were rejected. In response, Applicants have amended Claims 1, 32, and 50, thereby leaving Claims 2-31, 33-49, and 51-59 unchanged.

## **CLAIM REJECTIONS**

Claims 1-59 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 5,432,507 (“Mussino”). Reconsideration of the rejections is respectfully requested.

### **Claims 1-10**

Claim 1 recites a commodity monitoring network comprising a commodity provider operable to provide a commodity, at least one measuring device being operable to measure a utilization characteristic of the commodity provided by the commodity provider, and to generate utilization data based on the characteristic, and a gateway node including a network handler and a communication handler, the network handler being operable to receive data from the commodity provider, to verify a sender of the received data, to generate network data based on the data verified, and to send the network data to the communication handler, the communication handler being operable to receive the network data sent from the network handler, to generate communication data based on the received network data, to wirelessly transmit the communication data to the measuring device, and to wirelessly receive data including the utilization data from the measuring device.

To establish a *prima facie* case of obviousness, three basic criteria must be met. *M.P.E.P.* § 706.02(j), and 2143.

First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the references or to combine the reference teachings.

Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must be both found in the prior art, not in applicant’s disclosure.

*Id.* See also *In re Rougget*, 149 F.3d 1350, 1355 (Fed. Cir. 1998) (“To reject claims in an application under section 103, the Examiner must show an unrebutted *prima facie* case of obviousness. In the absence of a proper *prima facie* case of obviousness,

an applicant who complies with the other statutory requirements is entitled to a patent.”)

As indicated by the Examiner, Mussino does not teach or suggest a gateway node including “a network handler and a communication handler,” as recited in Claim 1. (See page 2, section 3 of the pending Office action.) The Examiner asserts that the “concentrator receives messages from the central telemetry station, generates and sends requests for each of the peripheral units, and receives measured data from the peripheral units,” and that it would have been obvious “to include a network handler and a communications handler to perform such functions since the concentrator already performs them.” (See pages 2-3 of the pending Office action.) Applicants respectfully disagree.

Rather, Mussino discloses a distribution network that includes a concentrator that “has the task of: collecting the information (readings, signals, alarms. etc.) sent by the Peripheral Unit; [and] sending to the Peripheral Unit the information or the commands transmitted by the PCT.” (See col. 8, lines 11-15.)

Moreover, the concentrator of Mussino does not include a network handler operable to verify a sender of the received data, and to generate network data based on the data verified, as recited in Claim 1. Rather, the concentrator disclosed in Mussino “has the function … to sort between such units the information coming from the PCT.” (See col. 8, lines 16-19.)

Verifying a sender of the received data involves functions, such as, for example, retrieving a utility identification, comparing the sender with the retrieved utility identification, generating a verified signal when the sender matches the retrieved utility identification, and the like. (See, for example, FIG. 9A of the pending application.) Further, generating network data actively involves functions such as creating a network message, routing the message to be further processed, and the like. (See, for example, page 10, lines 6-11, of the pending Application.) Sorting between peripheral units, as disclosed in Mussino, simply involves arranging information for the peripheral units in an order. For these and other reasons, Mussino does not teach or suggest the subject matter defined by Claim 1.

Accordingly, independent Claim 1 is allowable. Claims 2-10 depend from independent Claim 1 and are allowable for the same and other reasons.

#### Claims 11-20

Claim 11 recites a commodity monitoring network comprising a commodity provider operable to provide a commodity, at least one measuring device being operable to measure a

utilization characteristic of the commodity provided by the commodity provider, and to generate utilization data based on the characteristic, and a gateway node including a transceiver section, a network interface module and a programmable controller, the transceiver section having a plurality of communication channels and wirelessly receiving data including the utilization data and a channel selection from the device, the network interface module being operable to be coupled to the transceiver section, and the programmable controller operable to be coupled to the transceiver section, to process the channel selection from the transceiver section, and to set the transceiver section at a transceiver frequency corresponding to the channel selection.

Mussino does not teach or suggest a commodity monitoring network including, among other things, a gateway node including a transceiver section wirelessly receiving data including utilization data and a channel selection from the device. Mussino also does not teach or suggest a gateway node including a programmable controller operable to process the channel selection and to set the transceiver section at a transceiver frequency corresponding to the channel selection.

Rather, Mussino discloses a concentrator that “has the task of: collecting the information (readings, signals, alarms. etc.) sent by the Peripheral Unit; [and] sending to the Peripheral Unit the information or the commands transmitted by the PCT.” (See col. 8, lines 11 – 15.) Wirelessly receiving data such as a channel selection from the measuring device, processing the received data, and setting the transceiver section involve functions, such as, for example, reading radio-frequency channel selection from the measuring device, setting the communication handler for communication at the radio-frequency corresponding to the channel selection selected by the measuring device, and the like. (See, for example, page 14, lines 24-27, and FIG. 9C of the pending Application.) “Collecting the information (readings, signals, alarms. etc.) sent by the Peripheral Unit,” as disclosed in Mussino simply involves arranging information for the peripheral units in an order. For these and other reasons, Mussino does not teach or suggest the subject matter defined by Claim 11.

Accordingly, independent Claim 11 is allowable. Claims 12-20 depend from independent Claim 11 and are allowable for the same and other reasons.

#### Claims 21-31

Claim 21 recites a commodity monitoring network comprising a commodity provider operable to provide a commodity, at least one measuring device being operable to measure a utilization characteristic of the commodity provided by the commodity provider, and to

generate utilization data based on the characteristic, and gateway node means for receiving data including the utilization data and a channel selection over a network, for processing the received channel selection, for receiving the processed channel selection, and for setting a transceiver frequency corresponding to the channel selection.

Mussino does not teach or suggest a commodity monitoring network including, among other things, a gateway node means for receiving data including the utilization data and a channel selection over a network, for processing the received channel selection, for receiving the processed channel selection, and for setting a transceiver frequency corresponding to the channel selection. Rather, Mussino discloses a concentrator that “has the task of: collecting the information (readings, signals, alarms. etc.) sent by the Peripheral Unit; [and] sending to the Peripheral Unit the information or the commands transmitted by the PCT.” (See col. 8, lines 11-15.) Receiving data such as a channel selection from the measuring device, processing the received data, and setting the transceiver section involve functions, such as, for example, reading radio-frequency channel selection from the measuring device, setting the communication handler for communication at the radio-frequency corresponding to the channel selection selected by the measuring device, and the like. (See, for example, page 14, lines 24-27, and FIG. 9C of the pending Application.) “Collecting the information (readings, signals, alarms. etc.) sent by the Peripheral Unit,” as disclosed in Mussino simply involves arranging information for the peripheral units in an order. For these and other reasons, Mussino does not teach or suggest the subject matter defined by Claim 21.

Accordingly, independent Claim 21 is allowable. Claims 22-31 depend from independent Claim 21 and are allowable for the same and other reasons.

#### Claims 32-40

Claim 32 recites a method of monitoring a commodity utilization in a network, the network having a commodity provider operable to provide a commodity, a gateway node, and at least one measuring device being operable to measure a utilization characteristic of the commodity provided by the commodity provider, and to generate utilization data based on the characteristic. The method comprises receiving a commodity message from the provider at the gateway node, retrieving an address of the measuring device based on the message, verifying the address of the measuring device at the gateway node, wirelessly transmitting a device reading message to the device using the verified address from the gateway node, and

wirelessly receiving the commodity utilization data from the measuring device at the gateway node.

Mussino does not teach or suggest a method of monitoring a commodity utilization in a network including, among other things, verifying the address of the measuring device and wirelessly transmitting a device reading message to the device using the verified address, as recited in Claim 32. Rather, Mussino discloses a distribution network that includes a concentrator that “has the task of: collecting the information (readings, signals, alarms. etc.) sent by the Peripheral Unit; [and] sending to the Peripheral Unit the information or the commands transmitted by the PCT.” (See col. 8, lines 11-15.)

Moreover, the concentrator of Mussino does not include a network handler operable to verify a sender of the received data, and to generate network data based on the data verified, as recited in Claim 1. Rather, the concentrator disclosed in Mussino “has the function … to sort between such units the information coming from the PCT.” (See col. 8, lines 16-19.)

Verifying a sender of the received data involves functions, such as, for example, retrieving a utility identification, comparing the sender with the retrieved utility identification, generating a verified signal when the sender matches the retrieved utility identification, and the like. (See, for example, FIG. 9A of the pending application.) Further, generating network data actively involves functions such as creating a network message, routing the message to be further processed, and the like. (See, for example, page 10, lines 6-11, of the pending Application.) Sorting between peripheral units, as disclosed in Mussino, simply involves arranging information for the peripheral units in an order. For these and other reasons, Mussino does not teach or suggest the subject matter defined by Claim 32.

Accordingly, independent Claim 32 is allowable. Claims 33-40 depend from independent Claim 32 and are allowable for the same and other reasons.

#### Claims 41-49

Claim 41 recites a commodity monitoring network comprising, a commodity provider operable to provide a commodity, at least one measuring device being operable to measure a utilization characteristic of the commodity provided by the commodity provider, and to generate utilization data based on the characteristic, and a gateway node receiving routing data from the commodity provider and having a scheduler operable to program a scheduled reading list using the routing data, to retrieve a scheduled measuring device data from the

scheduled reading list, and to initiate a scheduled meter reading using the scheduled measuring device data.

While admitting that “[a]lthough a scheduler and list are not specifically taught [by Mussino]”, the Examiner argues that “it would have been obvious to include such means since there must be some means to poll the meters for data and there must be some list[s] to determine the address of the meters polled.” (See page 3, lines 6-9 of the Action.)

Moreover, even *arguendo* that Mussino does disclose a commodity monitoring network including a scheduler, Mussino does not teach or suggest a commodity monitoring network including a scheduler that is operable to *program* a scheduled reading list using the routing data, to retrieve a scheduled measuring device data from the scheduled reading list, and to initiate a scheduled meter reading using the scheduled measuring device data. Stated differently, Mussino fails to teach or suggest how such a “scheduler” would *program* such a “list” rather than simply “read” the proposed list.

Therefore, Applicants respectfully submit that the Examiner has not set forth a proper *prima facie* case of obviousness. For these and other reasons, Mussino does not teach or suggest the subject matter defined by Claim 41. Accordingly, independent Claim 41 is allowable. Claims 42-49 depend from independent Claim 41 and are allowable for the same and other reasons.

#### Claims 50-59

Claim 50 recites a utility monitoring network comprising a utility provider operable to provide a utility, at least one measuring device being operable to measure a utilization characteristic of the utility provided by the utility provider, and to generate utilization data based on the characteristic, and a gateway node including a network handler and a communication handler, the network handler being operable to receive data from the utility provider, to verify a sender of the received data, to generate network data based on the data verified, and to send the network data, the communication handler being operable to receive the network data sent from the network handler, to generate communication data based on the received network data, to wirelessly transmit the communication data to the measuring device, and to wirelessly receive data including the utilization data from the measuring device.

As indicated by the Examiner, Mussino does not teach or suggest a gateway node including “a network handler and a communication handler,” as recited in Claim 50. (See page 2, section 3 of the pending Office action.) The Examiner argues that the “concentrator

receives messages from the central telemetry station, generates and sends requests for each of the peripheral units, and receives measured data from the peripheral units,” and that it would have been obvious “to include a network handler and a communications handler to perform such functions since the concentrator already performs them.” (See pages 2-3 of the pending Office action.) Applicants respectfully disagree.

Rather, Mussino discloses a distribution network that includes a concentrator that “has the task of collecting the information (readings, signals, alarms. etc.) sent by the Peripheral Unit; [and] sending to the Peripheral Unit the information or the commands transmitted by the PCT.” (See col. 8, lines 11-15.)

Moreover, the concentrator of Mussino does not include a network handler operable to verify a sender of the received data, and to generate network data based on the data verified, as recited in Claim 50. Rather, the concentrator disclosed in Mussino “has the function … to sort between such units the information coming from the PCT.” (See col. 8, lines 16-19.)

Verifying a sender of the received data involves functions, such as, for example, retrieving a utility identification, comparing the sender with the retrieved utility identification, generating a verified signal when the sender matches the retrieved utility identification, and the like. (See, for example, FIG. 9A of the pending application.) Further, generating network data actively involves functions such as creating a network message, routing the message to be further processed, and the like. (See, for example, page 10, lines 6-11, of the pending Application.) Sorting between peripheral units, as disclosed in Mussino, simply involves arranging information for the peripheral units in an order. For these and other reasons, Mussino does not teach or suggest the subject matter defined by Claim 50.

Accordingly, independent Claim 50 is allowable. Claims 50-59 depend from independent Claim 50 and are allowable for the same and other reasons.

**CONCLUSION**

In view of the foregoing, entry of the present Amendment and allowance of the application are respectfully requested.

Respectfully submitted,

Stephen A. Gigot  
Reg. No. 51,232

File No. 086485-9013-00  
Michael Best & Friedrich LLP  
100 East Wisconsin Avenue  
Suite 3300  
Milwaukee, Wisconsin 53202-4108  
414.271.6560